

IDS Filed
07/23/2007

page 1 of 4

EDS
09/22/2007

(Modified) PTO/SB/08A-B (10-96)

Approved for use through 10/31/99. GPO 2005-051-0031

Substitute for form 1449A-B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	09/704469 - 10/686,945
		Filing Date	November 1, 2000 10/16/03
		First Named Inventor	Erik Karrer
		Group Art Unit	Unassigned 1631
		Examiner Name	Unassigned DeJong
Attorney Docket Number	02-102020US-0241US320		

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
/E.D./	AA	09/407,800		Maxygen, Inc.	09-28-1999
/E.D./	AB	09/408,392		Maxygen, Inc.	09-28-1999
/E.D./	AC	09/408,393		Maxygen, Inc.	09-28-1999
/E.D./	AD	09/618,579		Maxygen, Inc.	07-18-2000
/E.D./	AE	60/186,482		Maxygen, Inc.	03-02-2000
/E.D./	AF	4,634,664		Engelman et al.	01-06-1987
/E.D./	AG	4,634,666		Engelman et al.	01-06-1987
/E.D./	AH	5,756,316		Schellenberger	05-26-1998
/E.D./	AI	5,783,431		Peterson et al.	07-21-1998
/E.D./	AJ	5,824,485		Thompson et al.	10-20-1998

FOREIGN PATENT DOCUMENTS					
Examiner Initials	Cite No.	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office	Number		
/E.D./	AK	WO	00/00632	A1	Phylos, Inc
/E.D./	AL	WO	00/09676	A1	Proteus
/E.D./	AM	WO	00/42560	A2	Maxygen, Inc.
/E.D./	AN	WO	00/42560	A3	Maxygen, Inc.
/E.D./	AO	WO	00/42561	A2	Maxygen, Inc.
/E.D./	AP	WO	00/42561	A3	Maxygen, Inc.
/E.D./	AQ	WO	00/46344	A2	Diversa Corp.
/E.D./	AR	WO	00/46344	A3	Diversa Corp.
/E.D./	AS	WO	00/42559	A1	Maxygen, Inc.
/E.D./	AT	WO	95/22625	A1	Stemmer
/E.D./	AU	WO	96/33207	A1	Stemmer
/E.D./	AV	WO	97/35957	A1	Stemmer
/E.D./	AW	WO	98/42727	A1	SRI International
					T

Examiner Signature	/Eric Dejong/	Date Considered	09/22/2007
--------------------	---------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Page 2 of 4

EDJ
09/22/2007

COPY

FROM PARENT

(Modified) PTO/SB/08A-B (10-96)

Approved for use through 10/31/99. GPO: 2000-551-0031

Substitute for form 1449A-B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	09/704469 10/686,945
		Filing Date	November 1, 2000 10/16/03
		First Named Inventor	Erik Karrer
		Group Art Unit	Unassigned 1631
		Examiner Name	Unassigned DeJong
Attorney Docket Number 02-102020US 0241 US 320			

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
/E.D./	AX	Balint and Lerrick (1993) "Antibody Engineering by Parsimonious Mutagenesis." <i>Gene</i> 137:109-118	
/E.D./	AY	Chothia and Lesk (1987) "Canonical Structures for the Hypervariable Regions of Immunoglobulins." <i>J Mol Biol.</i> 196:901-917	
/E.D./	AZ	Giver et al. (1998) "Combinatorial protein design by in vitro recombination." <i>Current Opinion in Chemical Biology</i> 2(3): 335-338.	
/E.D./	BA	Gram et al. (1992) "In Vitro selection and affinity maturation of antibodies from a naïve combinatorial immunoglobulin library." <i>PNAS</i> 89:3576-3580	
/E.D./	BB	Hawkins et al. (1992) "Selection of phage antibodies by binding affinity. Mimicking affinity maturation." <i>J. Mol Biol.</i> 226:889-896	
/E.D./	BC	Hock (1997) "Antibodies for immuno-sensors: a review." <i>Analytica Chimica Acta</i> 347:177-186	
/E.D./	BD	Huse et al. (1989) "Generation of a Large Combinational Library of the Immunoglobulin Repertoire in Phage Lambda." <i>Science</i> 246:1275-1281	
/E.D./	BE	Jirholt et al. (1998) "Exploiting sequence space: shuffling in vivo formed complementarily determining regions into a master framework." <i>Gene</i> 215:471-476	
/E.D./	BF	Litman et al. (1993) "Phylogenetic diversification on immunoglobulin genes and the antibody repertoire." <i>Mol Biol Evol</i> 10:60-72	
/E.D./	BG	Low et al. (1996) "Mimicking somatic hypermutation: affinity maturation of antibodies displayed on bacteriophage using a bacterial mutator strain." <i>J. Mol Biol.</i> 260:359-368	
/E.D./	BH	Marks et al. (1991) "By-passing immunization. Human antibodies from V-gene libraries displayed on phage." <i>J. Mol Biol.</i> 222:581-597	
/E.D./	BI	Marks et al. (1992) "By-Passing Immunization: Building High Affinity Human Antibodies by Chain Shuffling." <i>Biotechniques</i> 10:779-782	
/E.D./	BJ	Schier and Marks (1996) "Efficient in vitro affinity maturation of phage antibodies using BIACore guided selections." <i>Hum Antibodies Hybridomas</i> 7:95-105	
/E.D./	BK	Stemmer et al. (1993) "Selection of an Active Single Chain Fv Antibody From a Protein Linker Library Prepared by Enzymatic Inverse PCR." <i>Biotechniques</i> 14(2):256-265	
/E.D./	BL	Stemmer et al. (1995) "Single-step assembly of a gene and entire plasmid form large numbers of oligodeoxy-ribonucleotides." <i>Gene</i> 164:49-53	
/E.D./	BM	Stemmer et al. (1997) "Molecular evolution of genes and pathways by DNA shuffling." <i>FASEB J.</i> 11:A1124	
/E.D./	BN	Ward et al. (1989) "Binding activities of a repertoire of single immunoglobulin variable domains secreted from Escherichia coli." <i>Nature</i> 341:544-546	

Examiner Signature	/Eric DeJong/	Date Considered	09/22/2007
--------------------	---------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

~~Page _____~~

Page 3 of 4
EDT
09/22/2007

(Modified) PTO/SB/08A-B (10-96)
Approved for use through 10/31/99. OMB 0651-0031

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(use as many sheets as necessary)

Substitute for form 1449A-B/PTO		Complete if Known	
		Application Number	09/704469 10/686,945
		Filing Date	November 1, 2000 10/16/03
		First Named Inventor	Erik Karrer
		Group Art Unit	Unassigned 1631
		Examiner Name	Unassigned DeJong
		Attorney Docket Number	02-102020US- 0241 US 320
/E.D./	BO	Winter et al. (1994) "Making Antibodies by Phage Display Technology." <i>Annu Rev. Immunol.</i> 12:433-455	
/E.D./	BP	Wu et al. (1970) "An analysis of the sequences of the variable regions of bence jones proteins and myeloma light chains and their implications for anti-body complementarity." <i>J. Exo Med.</i> 132:211-250	

Examiner Signature	/Eric Dejong/	Date Considered	09/22/2007
--------------------	---------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.